

# Kirkpatrick Framework Applied to the BCH Teaching Certificate Program

In applying the Kirkpatrick framework to evaluate the BCH Teaching Certificate Program, the directors and researchers drew on multiple data sources: a 2023 publication titled “Beyond the Workshop: Results From a Longitudinal, Interprofessional Teaching Certificate Program,” which reports findings from participants between 2017 and 2019; participant survey data collected from 2019 to 2025; and an ongoing qualitative analysis of 214, six-week post-seminar reflections from the 2021-2024 cohort, comprising 38 participants.

**At Level 1: Reaction**, the evaluation data show strong acceptability and perceived value. In the original *Beyond the Workshop* cohort, 100% of survey respondents reported that they would recommend the certificate program to a colleague, and all respondents indicated that the program helped them gain skills that increased their confidence as teachers. This positive response has continued in the later data from 2019–2025, where 96% of respondents rated the program as either Excellent or Very Good, and 80% strongly agreed that the program helped them gain skills that increased their confidence as teachers.

**At Level 2: Learning**, there is evidence that participants gained new knowledge, skills, and perspectives on teaching. In the original study, all 78 reflections described new teaching concepts, skills, or behaviors gained through the seminars and individual observations. Participants also reported learning from colleagues across professions and developing a stronger understanding of other health professionals’ roles. The current qualitative reflection study deepens this finding. Across 214 reflections, participants described shifts in their knowledge, perspectives, and educator identity. In particular, they moved away from one-size-fits-all approaches toward more learner-centered, individualized, and collaborative teaching strategies. They also described increased reflective practice and critical self-evaluation, suggesting growth in how they think about their role as educators.

**At Level 3: Behavior**, the data suggest that participants are transferring what they learn into practice. In the *Beyond the Workshop: Results From a Longitudinal, Interprofessional Teaching Certificate Program* study, 69 of 78 reflections described applying newly gained knowledge, and survey respondents reported incorporating skills from peer observation, master-teacher observation, and coaching into subsequent teaching encounters. Similarly, in the current reflection study, participants described applying seminar concepts in real teaching settings. They reported adopting more learner-centered methods, fostering engagement and collaboration, promoting bidirectional communication, and adapting their strategies based on learner responses. Importantly, the reflections suggest that participants are not simply trying a strategy once; they are engaging in an ongoing cycle of implementation, observation, reflection, and refinement.

**At Level 4: Results**, the evidence is more suggestive, but still meaningful. The original study showed that the program supported broader educator development outcomes, including connection to a community of educators and the formation of educational alliances grounded in mutual trust, shared values, and common goals for improving teaching. The current reflection study also points to proximal Level 4 outcomes, including perceived improvements in learner engagement, learner autonomy, inclusion, and collaborative learning environments. While the researchers cannot claim direct causal evidence of improved learner outcomes, these findings suggest that the program may be contributing to a more reflective, responsive, interprofessional, and learner-centered teaching culture.

Finally, it is important to acknowledge the limitations. Much of this evidence is based on self-reports, so the findings are best understood as promising and cumulative evidence of program impact, rather than definitive proof.

## **Brief Version**

### **Kirkpatrick Level 1: Reaction**

Evidence from the *Beyond the Workshop: Results From a Longitudinal, Interprofessional Teaching Certificate Program* study and 2019–2025 survey data demonstrated strong acceptability and perceived value.

- 100% of original cohort respondents would recommend the program.
- 96% of 2019–2025 respondents rated the program Excellent or Very Good.
- Participants reported increased confidence as teachers.

### **Kirkpatrick Level 2: Learning**

Participants gained new teaching knowledge, skills, and perspectives.

- 78/78 reflections in the original study described a new teaching concept, skill, or behavior.
- Current analysis of 214 reflections shows shifts toward learner-centered teaching, reflective practice, and critical self-evaluation.

### **Kirkpatrick Level 3: Behavior**

Participants reported applying what they learned in real teaching settings.

- 69/78 original reflections described application of new knowledge.
- Participants incorporated strategies from seminars, coaching, peer observation, and master-teacher observation.
- Current reflections show ongoing adaptation, collaboration, and refinement of teaching strategies.

### **Kirkpatrick Level 4: Results**

Evidence suggests broader impact on educator networks, teaching culture, and learning environments.

- Participants reported stronger connection to a community of educators.
- Reflections suggest increased learner engagement, autonomy, inclusion, and collaborative learning environments.
- Findings are promising but should be interpreted as proximal and self-reported, not causal evidence of downstream learner outcomes

# Teaching Certificate Program Evaluation Using a Logic Outcomes Model

Using a Logic Outcomes Model, the Teaching Certificate Program is found to be a successful longitudinal, volunteer-supported professional development initiative. It combines structured teaching content with reflection, coaching, peer observation, and master-teacher evaluation. Data are drawn from a 2023 publication titled “Beyond the Workshop: Results From a Longitudinal, Interprofessional Teaching Certificate Program,” which reports findings from participants between 2017 and 2019; participant survey data collected from 2019 to 2025; and an ongoing qualitative analysis of 214 six-week post-seminar reflections from the 2021-2024 cohort, comprising 38 participants. Taken together, the findings indicate that the program has enrolled 139 interprofessional participants, graduated 134, and maintained a 98% completion rate. Coaches have held 417 coaching sessions, and peer observers and master teachers have completed 278 individualized observations and debriefs. Participants report increased confidence, greater use of learner-centered strategies, deeper reflection, and ongoing improvements in teaching.

Using the Logic Outcomes Model helped make visible not only participant outcomes, but also the less visible infrastructure required to sustain the program, including dissemination through the nomination process, extensive administrative coordination, volunteer faculty/staff effort, and the rationale for a modest MD participant cost-recovery charge to support educational resources and behind-the-scenes program operations.

The table on the next 2 pages presents an evaluation of the Teaching Certificate Program using the Logic Outcomes Model.

Logic Model Component	Teaching Certificate Program Evidence
<b>Inputs</b>	2 Program Directors; 30 coaches; 6 observers; 11 facilitators; 1 administrator; 6 admissions reviewers; limited direct funding; substantial volunteer faculty/staff effort; modest MD participant cost-recovery charge to support administrative coordination and educational resources; annual nomination/application announcement disseminated to Division/Department leaders and the BCH Academy; structured selection process; course web portal and learning materials.
<b>Activities</b>	For each participant: 6 core seminars; 6 post-seminar reflections; 3 progress reports; 3 coaching meetings; 1 peer observation and debrief ; 1 master teacher observation and debrief; and final program evaluation survey
<b>Outputs</b>	<p>139 enrolled; 134 graduated; 98% completion; 417 coaching meetings; 139 peer observations/debriefs; 139 master teacher observations/debriefs, 100% attendance and reflection submission required. The program has had an interprofessional and interdisciplinary reach, including participants from:</p> <ul style="list-style-type: none"> <li>• Physicians</li> <li>• Nurses</li> <li>• Nurse practitioners</li> <li>• Physician assistants</li> <li>• Physical therapists</li> <li>• Occupational therapists</li> <li>• Social workers</li> <li>• Psychologists</li> <li>• Dentists</li> <li>• Ophthalmologists</li> </ul> <p>From:</p> <ul style="list-style-type: none"> <li>• Pediatrics and General Surgery as well as</li> <li>• Neurosurgery</li> <li>• Anesthesiology</li> <li>• Cardiac surgery</li> <li>• Neurology</li> <li>• Other clinical and health professions disciplines</li> </ul>

<b>Short-Term Outcomes</b>	<p>Increased teaching confidence, knowledge, reflective practice, learner-centered mindset, and interprofessional awareness, more specifically:</p> <ul style="list-style-type: none"> <li>• Increased confidence as teachers</li> <li>• Increased knowledge of educational strategies</li> <li>• Greater awareness of learner-centered teaching</li> <li>• Greater capacity for reflective practice and critical self-evaluation</li> <li>• Increased understanding of teaching frameworks</li> <li>• Increased awareness of interprofessional roles and perspectives</li> <li>• Stronger connection to a community of educators</li> <li>• Participants describe changing their mental models about effective teaching</li> <li>• Participants recognize the need to adapt strategies to learners' needs rather than rely on one-size-fits-all approaches</li> </ul>
<b>Intermediate Outcomes</b>	<p>Application of teaching strategies, adaptation to learner needs, enhanced engagement, collaboration, and sustained refinement of teaching practice, more specifically, participants have described that they:</p> <ul style="list-style-type: none"> <li>• Apply new teaching strategies in real teaching settings</li> <li>• Adapt teaching approaches based on learner needs</li> <li>• Foster greater learner engagement</li> <li>• Use more bidirectional communication</li> <li>• Promote collaborative problem-solving</li> <li>• Build more inclusive and participatory learning environments</li> <li>• Continue refining their teaching after initial implementation</li> </ul>
<b>Long-Term Outcomes</b>	<p>Evidence of long-term outcomes is promising, with some outcomes emerging or aspirational. Examples include strengthened educator identity, development of an interprofessional educator community, enhanced teaching leadership, and greater participation in educational scholarship, curriculum development, mentoring, and teaching leadership. Participants also describe becoming more reflective, teaching others new strategies, and contributing to a community of practice in health professions education.</p>